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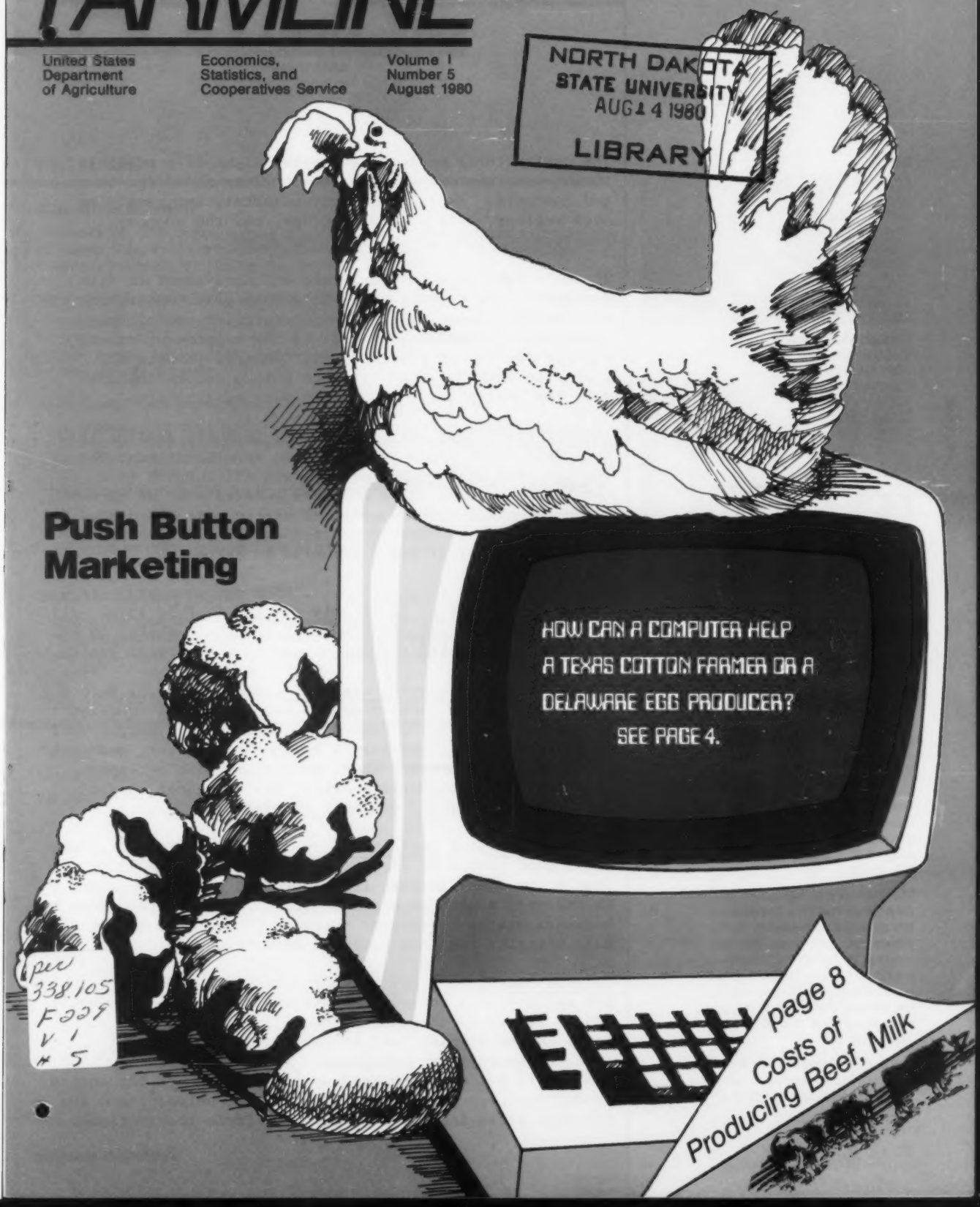

Push Button Marketing

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Costs of Producing Beef, Milk

Perspectives

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The agricultural economy is showing signs of a possible turnaround that may promise better times ahead for farmers and ranchers. But with so many uncertainties remaining over weather, U.S. and world crops, and the economy, analysts hesitate to be too encouraging.

It won't take much to constitute an improvement in farm economics from conditions earlier this year, and no one expects that losses will turn into profits overnight. Also, some farmers may benefit at the expense of others hurt by the recent poor weather. So most farmers are likely to look for more evidence before recovering the optimism they put out to pasture some time ago.

Tighter grain supplies coming . . . Look for smaller 1980 U.S. feed grain crops and increased export demand. The tighter feed grain supplies may even add support to a record wheat crop. USDA analysts predict that we'll have to draw down total U.S. grain stocks to meet the demand in the 1980/81 year. That's the reverse of what's been happening this year and a stimulus to prices.

Watch production forecasts . . . USDA put corn production at 7.28 bil. bushels as of July 1, down 6% from 1979. All wheat output was set at a record 2.32 bil. bushels, up 8%. But continuing weather problems may further affect yields.

Livestock sector showing signs of turnaround . . . Record meat supplies and economy-minded consumers have squeezed producers into cutting back. Beef and broiler output will drop from year-earlier levels in the 3rd quarter, and pork production in the 4th. Thus, prices and cash receipts will improve in the second half. Hog slaughter should drop sharply in the first half of 1981.

Economists expect early recovery from recession . . . They see a good chance of recovery beginning in early 1981. That's important because it should mean renewed strength in red meat demand as supplies are slipping. Also, when business starts to recover somewhat later, it would mean more security for farm families dependent on off-farm jobs.

Despite start, 80's may be good decade . . . World demand for agricultural commodities has increased at a rapid pace and is likely to continue to do so in the 1980's. There is no longer a great deal of low cost, highly productive land to develop here or abroad. Thus, it's more likely that world and domestic food needs will require the entire productive capacity of U.S. agriculture, unless there are dramatic yield increases or stifling trade restrictions.

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Before TELCOT, cotton farmers in a Plains, Tex., cooperative had to bid for buyers. Now, thanks to their computerized marketing system, they watch buyers across the nation bidding for their cotton.

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Population growth continues, but tomorrow's "miracle" technologies are already lining up. Though it may be the 21st century before they give productivity a major jolt, until then, farmers are likely to squeeze further gains from tools already at hand.

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A stagnating domestic market and increasing competition abroad worry U.S. tobacco producers who are hoping that growing demand in developing nations will rekindle the industry.

Credit Crunch of 1980: The Squeeze Eases—A Tad 12

Even with credit a little cheaper and easier to obtain than earlier in the year, some farmers are still unable to finance expansion or new equipment purchases while others must pay back loans at interest rates that add to the burden of higher production costs.

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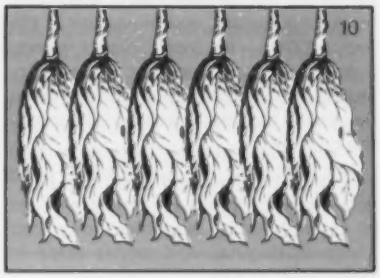
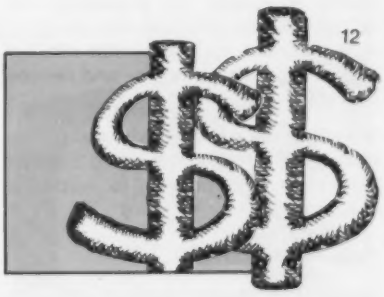
Study your local basis—that's the first step in using futures markets. Your basis is more predictable from year to year than either cash or futures prices, and it can be a key to profits—even if you deal strictly in the cash market.





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Push Button Marketing

At a cotton gin near Lubbock, Tex., farmers watch a television-like electronic screen, anxiously following the action.

On the screen are words and numbers which, to these members of the Plains Cotton Cooperative Association, are more important than a Dallas Cowboys football game. They are watching bidders across the nation haggle over a price for their cotton.

TELCOT, the cooperative's electronic marketing system, was conceived in the early 1970's. In more recent years, similar computerized or computer-assisted marketing systems have been developed for other commodities across the country.

For example, this year pilot test projects are in progress for slaughter hogs in Ohio (HAMS), slaughter cows and sheep in Virginia, and feeder cattle in Texas (CATTLEX).

Also, Egg Clearinghouse, Inc. (ECI) is testing a system for expanding the scope of the existing ECI trading network to sell eggs nationwide with the use of a central computer and remote terminals.

Whatever the name or commodity, the basic idea is the same: using modern computer technology to improve marketing.

Tailor-Made Service

Each system is tailor-made to serve the needs of sellers and buyers, but many aspects of all are similar to the TELCOT system, which opened in 1975.

Before TELCOT, cotton farmers were limited to trading with only a few potential buyers through time-consuming telephone negotiations. If no deal was reached with one buyer, the farmer called another and began negotiating all over again.

Plains cooperative's system uses computer terminals with display screens at about 350 cotton gins and in 60 offices serving buyers across the nation. About 90 percent of Plain's cotton output is purchased through TELCOT.

To offer a producer's cotton to buyers, the cooperative flashes basic information to all terminals on the network. Buyers, using typewriter-like keyboards, bid blindly—not knowing competitors' bids. The lot goes to the highest bidder after 15 minutes.

Or, Plains can offer members' cotton at a firm asking price which stands until someone buys or until it's withdrawn. The firm price option is the most popular among both buyers and sellers.

Variations abound. At ECI, the egg cooperative, for example, egg trades are concluded by telephone after being matched with buyers by computer. Negotiation procedures also differ. Like TELCOT, CATTLEX offers buyers a means of obtaining progressively more information about a given lot as their interest grows. HAMS features a descending auction option, in which the bid price drops until a buyer accepts.

Computers Offer Advantages

Whatever the variations, computer systems offer strong advantages to almost everyone concerned, according to USDA economists George Hoffman and Gerald Engelmar.

"It applies recent advances in computer technology to some important problems facing markets for many agricultural products," Engelman says.

Citing TELCOT as an experience that verifies that electronic markets are feasible and workable, Hoffman and Engelman list these advantages:

- Electronic selling increases competition. Each seller is in contact with more buyers, and each buyer is in contact with more sellers.
- Producers can instantaneously expose their products to many buyers, and should get better prices through wider bidding.
- It reduces travel costs associated with trading, since business is conducted through remote communications.
- It reduces transportation and cross handling of the commodities—along with the accompanying expense and product loss.
- It compiles and shares comprehensive market and price information, sharpening the competitive edge of smaller traders, and reducing the need for outside information.
- It helps sellers and buyers time their trading to fit their needs. Sellers can quickly offer and negotiate when the market is right. Buyers can time purchases and deliveries as needed for efficient product flow.
- Buyers can more easily select specific types of products, or come up with the desired mix of quality.
- It improves sellers' ability to commingle products and buyers' ability to control delivery.
- It requires only one or two contacts, concluding trades in minutes.
- It allows market regulators to more easily reduce risks of default in payment or delivery. The computer terminal printout is the record.

• It may offer many "spinoff" services to clients at relatively low cost. Examples include accounting for trades, relaying individual messages, automatic handling of invoices and payments, transportation arrangements, and commodity news.

The Minus Side

On the other hand, Hoffman quickly allows that electronic marketing is not a panacea. "Like all new ideas and systems, electronic marketing has some problems to overcome," he says. Some of these are:

• The need for establishing a usable set of grades and product descriptions acceptable to all potential traders. Each system depends on buyer acceptance of grades and descriptions so that personal inspection isn't necessary.

• The impersonal nature of electronic systems concern some participants who look for such nonprice considerations as the reputation of the trading partner, credit risks, and terms of payment.

• Resistance to change arises from reluctance to give up a flawed but familiar old system for a new one which is still being developed.

• Fixed costs are considerable in setting up such a system. While the per unit cost is low once enough clients are participating, cost per customer can be hefty in the beginning.

Before TELCOT, cotton farmers were limited to trading with only a few potential buyers through time-consuming telephone negotiations. If no deal was reached with one buyer, the farmer called another and began negotiating all over again.

Incentives Offered

Even with such obstacles, Hoffman and Engelman find plenty of incentive for producers to consider such systems—with due attention to drawbacks.

"It is probably essential that both buyers and sellers are involved in the development of the system to ensure that it is compatible with their needs," Hoffman stresses.

From a broader viewpoint, the development of electronic marketing could fill a gap by making up for the decline in recent years of large, organized central markets and by improving the pricing efficiency in the marketing of agricultural products.

Taking the place of central markets have been direct buyer-seller negotiations. The far fewer buyers have the edge over sellers in market information.

With transactions widely dispersed, it's hard to compile accurate public price information.

Beside giving an edge to larger traders, lack of public price information "increases the potential for price distortion through selective or inaccurate reporting or release of information concerning the terms of private transactions," Engelman notes.

"The technology is here today and available," Engelman says. "The potential benefits are great. The challenge is to find an effective way of adopting the existing technology to the particular circumstances of diverse markets to realize those gains."

Agricultural Productivity: No New Miracles?

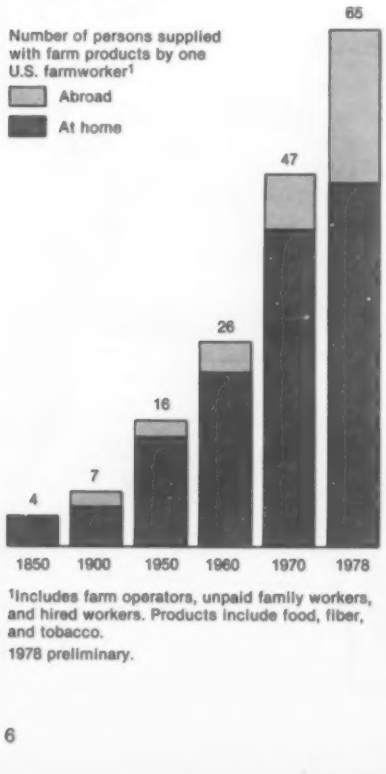
A Kansas farm family studies the latest marketing recommendations on the video-computer while photo-electric sensors monitor the ripening corn fields for computerized application of water and pesticides.

The year? It could be 2100, 2000, or even 1985. The obstacles are economic, not technological, according to USDA economist Leroy Quance, who is evaluating the prospects for future productivity growth in agriculture.

Although such space-age gadgetry is already in experimental use, it takes years before promising new technologies make significant contributions to productivity.

"As far down the road as we can see, conventional ways of agriculture will satisfy our food needs," Quance says.

U.S. Farmer Supplies Many Here and Abroad



[1]Includes farm operators, unpaid family workers, and hired workers. Products include food, fiber, and tobacco.

1978 preliminary.

But, even so, steady gains in basic technology will be needed to grow more food on limited land areas.

Knowledge for New Technology

Knowledge and technology are gaining over land as the key factors to better production in years ahead. "We're becoming less dependent on land as the limiting factor of productivity," Quance says.

The need for continuing productivity gains is apparent from a look at world population figures and the distribution among the "have" and "have not" countries. By 2000, the current 3.3 billion population of the developing countries may reach 5 billion; the developed countries will rise only from 1.2 to 1.4 billion.

To feed these people, annual food grain production must increase from the current 1.3 billion metric tons to about 2.0 billion. And the U.S. will produce a significant share of the needed increase in food and feed grains.

This task isn't impossible. On the average, one American farmer produces enough for 65 people: 46 at home and 19 abroad. Forty years ago, a U.S. farmer produced only enough for 11 people. But such dramatic gains in productivity can be found only in recent history.

Many experts worry that comparable gains won't materialize fast enough to keep food production in balance with growing consumption. So, what's the immediate outlook for gains in productivity? There's no clear consensus.

No New Miracles?

Some analysts contend that we've already pushed current technology to its limits, and they see no new miracles in the next few years.

Quance's figures show that annual productivity gains have slowed to about 1½ percent since 1960, down from an average of 2 percent per year in the previous two decades. Nevertheless, he disagrees with both the prophets of doom who predict that food needs will soon outstrip productivity and the peddlers of a technology fix (money will solve any problem).

For future prospects, productivity will vary with the weather and the economy, according to Quance, "but, on the average, will likely increase 1½ to 2 percent per year." He supports the belief that the laws of supply and demand will, through proper public and private management, generate enough productivity growth in the next few decades to keep the vital food equation in general balance.

Reflecting upon productivity in the next century, Quance sees potential for new

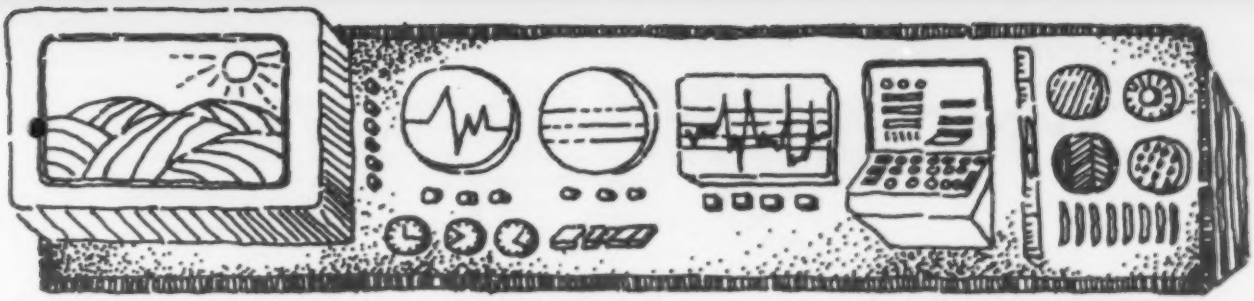
Hand Power To Hybrids

Prospects for farming productivity come into perspective when you look at history.

Four periods during the past 200 years define the major sources of technological change: hand power, the ancient technology that existed up to the Civil War; horse power, from the Civil War to World War I; mechanical power from World War I to World War II; and science power from World War II into the foreseeable future.

Before WWII, the new power sources tended to be substitutes for the old ones—more efficient certainly, but with limited potential. For example, when horse power replaced hand-powered agricultural implements, productivity growth was at first rapid but then leveled off after the increased efficiencies from horse power were realized.

But science-power technologies, such as chemical fertilizers and hybrid plant varieties, came along with mechanization after WWI. Although the complete substitution of mechanical power for horse power



growth, possibly unprecedented, as some of today's emerging technologies impact the work of the farmer.

Emerging Technologies

USDA analysts identify 12 emerging technologies as having a particularly significant potential for the future:

- twinning of beef cattle
- photosynthetic enhancement
- bioregulators
- water and fertilizer management
- new pest control strategies
- controlled environment or greenhouse agriculture
- multiple and intensive cropping
- reduced tillage
- new crop development
- bioprocessing
- breeding of plants to thrive on salt water
- alternate energy forms and organic waste recycling

Of these emerging technologies, scientists single out only the first three as having "potentially unprecedented impacts on productivity," according to Quance.

Good Tools at Hand

Although decades may pass before these emerging technologies are widely adopted in agriculture, farmers are likely to squeeze further productivity gains from the tools already at hand.

Yields will increase through greater use of the same basic technology that boosted them in the last two to three decades—hybrid seed, more fertilizer, improved machines, narrower rows, higher plant population per acre, chemical weed control, and continuous use of high-yielding crops.

Better farm management can also help. The top 10 percent of U.S. farmers with the highest yields of major crops such as corn, wheat, soybeans and cotton achieve yields 50 to 80 percent greater than average. Although all producers cannot reach these productivity levels, most can improve.

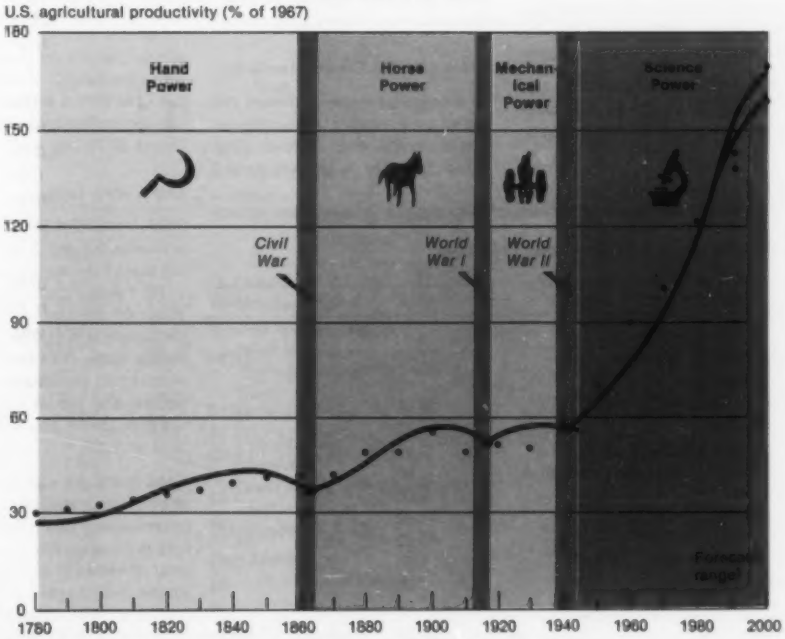
occurred by the close of WWII, productivity continued to accelerate.

So far, new technologies appear to have excellent potential to improve productivity through continuing research and development, according to USDA economist Leroy Quance. However, with most available U.S. cropland already in production, future gains may rely on energy-intensive factors of production, such as chemical fertilizers, pesticides, and fossil fuels at a time of expensive and unreliable energy supplies.

There are other problems to be faced as well. Western irrigated agriculture must compete with urban and industrial energy users for limited water supplies. Also, more intense land use increases soil erosion and environmental damage. At the same time, inflation has been eating away at expenditures for agricultural research.

So the future of technology-based productivity growth in agriculture depends as much on economics, politics, and our society as on science.

Productivity Growth Soars Under Science Power



[1]Range encompasses expected and maximum rates of productivity growth.

DEPARTMENT

COMMODITIES

Each year, USDA's Economics, Statistics, and Cooperatives Service prepares cost-of-production estimates for various agricultural commodities.

The following short articles summarize the most recent estimates for some of these commodities, with final figures for 1978, preliminary estimates for 1979, and projections for this year.

Data for these annual reports are based on producer surveys, with the results updated using a computerized cost-estimating procedure.

Farmer Feeders in Cost-Price Squeeze

It's a mixed picture for cattle feeders' returns this year. In general, returns to large commercial feedlots may average about $2 per cwt. above production costs.

Farmer feeders will not do as well. They'll probably cover their cash costs with about $5 left for noncash investment items totaling about $12 per cwt. However, returns should improve in this half of the year, helping to offset some of the losses incurred in the first half.

The national average cost (including direct, ownership, management, and land tax costs) of feeding a steer to slaughter weight is projected to rise 5 percent this year to $69.85 per cwt. At the same time, fed cattle prices may rise only 2 percent to around $68.91. By these estimates, the average cattle feeder will be out 94 cents for each 100 pounds sold in 1980.

That contrasts with the positive average return last year of 83 cents per cwt., with total costs running $66.93 and farm prices at $67.76. In 1978, cattle feeders made $3.14 per cwt. of fed beef produced.

Losses To Hit Farmer Feeders

Of course, all these estimates are based on averages. As suggested above, costs and returns differ significantly for large commercial feedlots, predominant in the Great Plains and western states, and smaller farm-feedlot operations, found mainly in the Corn Belt.

Although feedlots with the capacity to produce more than 1,000 head of fed cattle annually account for less than 2 percent of all feedlots, they provided 72 percent of all fed cattle marketed in 1979.

The vast majority of feedlots have a production capacity of less than 1,000 head and are typically part of a mixed enterprise farm often specializing in small grain production. They account for only 28 percent of fed cattle production and have higher production costs per cwt. than larger commercial feedlots.

Last year, while commercial feedlots made $1.65 per cwt. for their cattle, farm-feedlot operators suffered a loss of 73 cents. A similar pattern will prevail in 1980, with commercial feedlots ending the year with a positive return of $2.17 per cwt. and farm-feedlots losing $6.75 per cwt.

Last Year's Legacy

This year's cost-price squeeze is primarily the result of rapidly rising prices for feeder cattle in late 1979. Feeder cattle account for about 60 percent of the average cattle feeder's budget. Prices of feeder cattle marketed in 1979 increased 29 percent from the year before, and feeder cattle costs are expected to rise another 3 percent in 1980.

Feed costs are cattle feeders' second largest expenditure, representing about 21 percent of total annual outlays. In 1980, the cost of feed will remain fairly stable, inching up 1 percent or so. Last year, feed costs were 10 percent higher than in 1978.

Other production costs—including energy, machinery, and agricultural chemicals—will jump 16 percent following an estimated 14-percent increase last year. These items account for about 7 percent of average operating costs.

Cattle Feeders To Show Loss This Year

Item	1978	1979[1]	1980[2]
	dollars per cwt.[3]		
Returns from fed beef	52.40	67.76	68.91
Direct costs:			
Feeder cattle (56.5 lbs.)	26.51	40.98	42.13
Feed	14.43	15.95	16.12
Other production items	3.82	4.33	5.03
Interest on operating capital	.97	1.57	2.19
Labor	1.26	1.39	1.52
Manure credit	- .47	- .51	- .65
Total direct costs	46.52	63.71	66.34
Ownership costs[4]	1.95	2.32	2.53
Management	.75	.86	.94
Land tax[5]	.04	.04	.04
Total costs:	49.26	66.93	69.85
Net return:	3.14	.83	- .94

[1] Preliminary. [2] Projected. [3] Noncash costs included, but cash costs make up about 94 percent of the total. [4] Interest and taxes, based on original investment values, plus insurance and replacement reserves, based on current investment values. [5] Interest on investment in land occupied by feedlot facilities would add 37 cents per cwt. to costs for 1978.

Cow-Calf Profits Slip as Feeder Prices Slide

The average cost of producing feeder calves and yearlings is projected to increase 15 percent this year, while gross returns fall by 5 percent. Net returns will remain positive, however, averaging $18.59 per cwt.

Although this is a sharp turnaround from last year when the average net return nearly tripled to 35.63 per cwt., it is still well above 1978's $13.21 per cwt. Gross returns rose 38 percent in 1979, while costs increased 26 percent.

Last year's higher returns were due a sharp increase in feeder cattle prices. Feeder calves and yearlings brought $85.06 per cwt., compared with $63.81 in 1978. The farm price of feeder cattle has been falling so far this year and is expected to average $79.62 for 1980.

Feed costs—the largest cost other than land in the average cow-calf producer's budget—are expected to increase 13 percent in 1980, while other production items move up 23 percent. The largest increase will come for interest on operating capital—up 43 percent from 1979.

Beyond The Averages

Looking beyond these national averages, costs and returns vary greatly among cow-calf producers of different sizes and regions.

The most recent data on the effects of size in cow-calf production are for 1978. They show that while total nonland costs averaged $67.32 per cwt., they ranged from $78.74 for farmers with fewer than 100 cows to $37.49 for those with 1,000 or more.

For the smallest operations, receipts just barely covered cash costs and necessary noncash costs in 1978, leaving nothing to cover longrun ownership costs. For the largest operations—those with herds of 1,000 or more—receipts exceeded total shortrun costs by $20.65 per cwt.

Costs and returns also vary greatly by region, in part reflecting the mix of various-size operations in different areas.

Feed Costs Squeeze Southeast

The regional difference in feed costs partly accounts for the cost-price squeeze forecast for southeastern producers. Cow-calf enterprises in the southeast have the highest feed costs, primarily because of their dependence on improved pasture requiring heavy fertilization. By contrast, Great Plains producers spend virtually no money on range improvement.

Cash costs for feed are projected to total $44.91 per cwt. for southeastern producers in 1980 and $24.45 for those in the Great Plains. Since feed costs represent about 40 percent of a cow-calf producer's total outlays, such a difference has an enormous effect on net returns.

More Milk in Cows

For U.S. milk producers, this is likely to be a year of better net returns as farm milk prices rise faster than the cost of production and as milk output per cow keeps improving.

After allowing for income earned on the sale of cull cows and veal calves, the total cost of producing 100 pounds of milk is forecast at $11.33—up 8 percent from last year. Sales receipts are figured at $13.22 per cwt., a 10-percent jump.

Thus, the average net return to milk producers this year is projected at $1.89 per cwt., up from $1.49 in 1979 and $1.18 in 1978.

Feed costs are the largest part of the dairy producer's budget, making up about 40 percent of total annual outlays. Average feed costs this year may rise a mere 2 cents per cwt. to $4.97. Prices of grains and commercially mixed concentrates are expected to decline, while forage costs rise only marginally.

Milk output per cow, meanwhile, looks likely to score another gain. After rising nearly 2 percent in 1979, experts predict a 1.4-percent rise to 11,631 pounds in 1980. A 1-percent rise in milk yield per cow shaves production costs per cwt. by about 1 percent.

Energy Prices and Interest Rates

Although feed costs may remain fairly steady this year, other production costs are forecast to rise dramatically. Fueled by rapidly rising energy prices and interest rates, direct costs other than feed—including transportation, fuel and electricity, hired labor, and interest on operating capital—are expected to increase more than 13 percent in 1980.

Indirect costs—primarily noncash costs of ownership and for family labor and management—are projected to rise 11 percent per cwt. The steepest rise will be in ownership costs (for machinery, buildings and equipment, and livestock), which will be up 14 percent.

Cow-Calf Returns To Decline in 1980

Item	1978	1979[1]	1980[2]
	dollars per cwt.[3]		
Returns:			
Feeder calves and yearlings	63.81	85.06	79.62
Cull cows	16.72	26.24	25.72
Gross returns	80.53	111.30	105.34
Direct costs:			
Feed	27.77	29.74	33.53
Other production items	10.12	11.93	14.70
Hired labor	2.95	3.22	3.51
Interest on operating capital	1.45	2.10	3.00
General farm overhead	2.85	3.14	3.60
Total direct costs	45.14	50.13	58.34
Ownership costs[4]	.96	1.13	1.22
Family labor and management[5]	17.14	19.74	21.86
Land taxes	4.08	4.67	5.33
Total costs	67.32	75.67	86.75
Net return[6]	13.21	35.63	18.59

[1] Preliminary. [2] Projected. [3] Noncash costs included, but cash costs make up 65 to 70 percent of the total. [4] On machinery, equipment, buildings, and facilities. [5] Noncash costs. [6] Covering short-run costs for operators whose primary business is raising cows and calves; not an estimate for operators just entering the business with large outstanding debt on machinery and equipment, buildings and facilities, livestock, and feed.

Returns to Milk Producers Up Sharply

Item	1978	1979[1]	1980[2]
	dollars per cwt.		
Milk receipts	10.52	11.99	13.22
Direct costs:			
Feed	4.62	4.95	4.97
Grains and commercial concentrates	2.43	2.77	2.68
Forages	2.19	2.18	2.29
Overhead[3]	.40	.44	.47
Milk hauling	.32	.38	.46
Fuel and electricity	.25	.30	.39
Hired labor	.31	.33	.35
Interest on operating capital	.08	.11	.13
Other[4]	.55	.61	.66
Total direct costs	6.53	7.12	7.43
Indirect costs:			
Ownership[5]	1.63	2.40	2.74
Family labor and management	2.26	2.50	2.67
Land allocation[6]	.15	.19	.23
Total indirect costs	4.04	5.09	5.64
Total costs	10.57	12.21	13.07
Income from cull cows and veal calves	- 1.23	- 1.71	- 1.74
Net costs	9.34	10.50	11.33
Net returns	1.18	1.49	1.89

[1] Preliminary. [2] Projected. [3] Includes bookkeeping, telephone, and general maintenance. [4] Artificial insemination, veterinary and medicine, machinery and equipment repairs, and miscellaneous expenses. [5] Primarily interest charges on machinery, buildings and equipment, and livestock inventory. [6] Includes taxes and interest on land used for the dairy lot and pasture.

FEATURE

Third World Smoke Signals Cheer Tobacco Growers

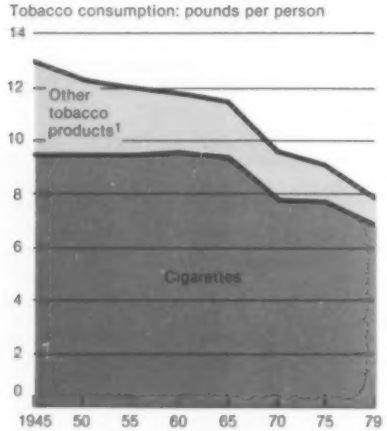
With growth in tobacco consumption slowed at home by a number of factors including the antismoking campaign, U.S. growers are looking toward foreign markets to rekindle the industry.

On the bright side, from a tobacco grower's perspective, is evidence that excellent new markets may be springing up in Third World countries.

However, on the home front, tobacco is facing lean times. A steady decline in U.S. per capita use during the last decade has clouded tobacco's future here. Signs of a stagnating domestic tobacco market abound, leaving industry leaders worried:

- Last year, the average American smoked, chewed, or sniffed less tobacco than in any year since 1898.

Today's American Smokes, Chews, and Sniffs Less Tobacco



[1]Cigars, smoking tobacco, chewing tobacco, and snuff.
1979 preliminary.

- From a high of 1.43 billion pounds in 1965, U.S. tobacco consumption dropped to an estimated 1.25 billion pounds in 1979.
- U.S. cigarette sales rose slightly in 1979, as they have for the last 10 years. But USDA experts describe this sales trend as flat because cigarette smoking is not increasing as fast as population growth.

Revealing Statistics

A closer look at per capita cigarette smoking is even more revealing. In 1963, better than half of U.S. adult males and nearly one-third of all U.S. women smoked cigarettes. Adult smokers averaged a record 4,345 cigarettes each.

By the end of 1978, only 38 percent of men and 30 percent of women smoked. Per capita use dropped to 3,967.

It's one thing for fewer cigarettes to be smoked. But demand for U.S. tobacco is affected even more than the above figures indicate because:

- Greater efficiency by cigarette manufacturers is resulting in less tobacco waste. Also, the drive for low-tar, low-nicotine brands has led to less tobacco being used in cigarettes, even since the introduction of extra-longs.
- More foreign tobacco is being used in domestic cigarettes as "filler" because it is cheaper than domestic leaf. The percentage of imported tobacco in domestic cigarettes rose from 11 percent in 1965 to 22 percent in 1978.

Looking ahead, antismoking sentiment is certain to continue to dampen U.S. sales. Per capita use should continue to decline by 1 to 2 percent per year. By 1990, current per capita U.S. cigarette use could decline as much as 25 percent.

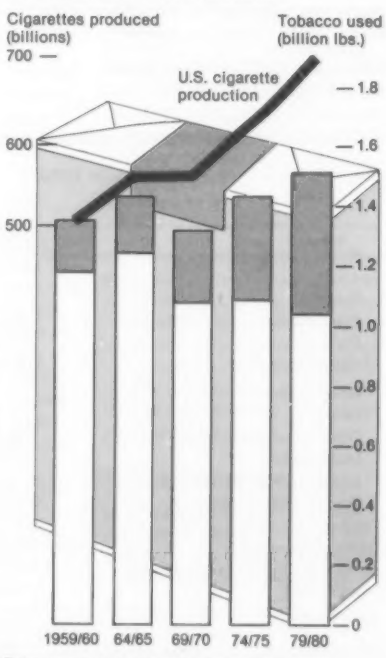
Overseas Markets

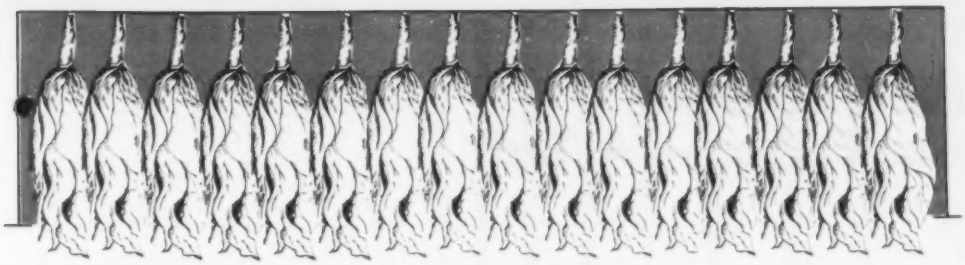
So, tobacco growers must look overseas for a note of optimism, but, with sprouting competition from Brazil, Korea, Thailand, Malawi, and now Zimbabwe (formerly Rhodesia), that optimistic note is soft, even though the U.S. is the world's largest exporter of tobacco.

Of great concern is a resurgence of competition from Zimbabwe. Before U.N. trade sanctions were imposed on Rhodesia 15 years ago, its tobacco ranked second in quality, only to America's. With sanctions lifted, tobacco experts say Zimbabwe could place 200 to 400 million pounds of leaf tobacco on world markets by the mid-1980's.

For years, the U.S. has offered a premium quality, high priced tobacco. However, in recent years, these other

More U.S. Cigarettes Produced, But With Less U.S. Tobacco





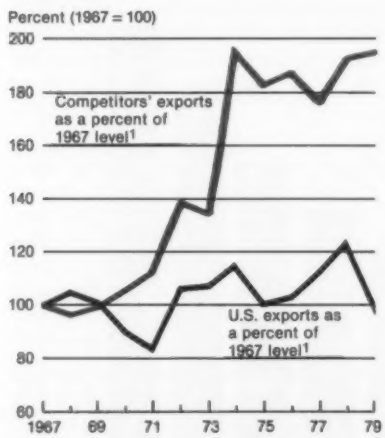
Tobacco growers are looking overseas for a note of optimism but, with growing competition from Brazil, Korea, Thailand, Malawi, and now Zimbabwe, that optimistic note is soft.

countries have entered the market with tobacco almost as good but cheaper. As a result the U.S. share of the world market is declining.

During 1960-64, U.S. leaf exports accounted for 30 percent of world total. By 1979, the share had fallen to 18 percent.

In 1979 alone, U.S. shipments of leaf and other unmanufactured tobacco fell 19 percent to 567 million pounds, lowest since 1975.

Competitors Maintain Earlier Gains, While U.S. Tobacco Exports Slump Last Year



[1]U.S. tobacco exports in 1967 totaled 572 million pounds; competitors' tobacco exports 1.25 billion pounds.
1979 estimated.

European Sales Drop

Mainly responsible was the drastic reduction in sales to European markets. In 1978, West Europe took nearly 60 percent of U.S. tobacco exports. But last year the share dropped to 29 percent. Sales were smaller because Europe had stockpiled high quality supplies from the 1978 U.S. tobacco crop.

In addition, several European countries experienced a drop in domestic tobacco sales similar to the U.S.

A look at last year's tobacco sales to Japan is another indication of the poor showing by the U.S. on world markets. Although sales to Japan fell 6 percent in 1979 to 96 million pounds, that country still surpassed the United Kingdom as the leading destination for U.S. tobacco. The reason: Sales to the United Kingdom were off 54 percent.

Some other important markets which showed declines of 20 percent or more in U.S. tobacco purchases from 1978 levels were Spain, Egypt, Denmark, Switzerland, and Sweden.

Exports Are Best Hope

Nonetheless, most experts say the world market—where tobacco consumption increases about 2 percent per year—is the only place where significant growth can occur.

That assessment is rooted largely in the persistent increase in demand for cigarettes from the developing nations of the Third World.

In the Middle East and other Asian countries, U.S. cigarette sales rose substantially last year, despite an early cutoff in exports to Iran. Exports of cigarettes to South America and Africa also increased.

This growing overseas market carries some hope for the tobacco farmer caught in the squeeze of smaller crop returns and inflation. Prospects for growth in cigarette exports are expected to support as much as a 14-percent increase in total U.S. cigarette output by 1990.

However, growing Third World demand for tobacco won't necessarily translate into long-term economic salvation for the American tobacco farmer.

U.S. Tobacco's Higher Price

Price is a key obstacle. Foreign buyers complain that, despite the high quality, U.S. tobacco is simply too expensive.

On world markets, U.S. flue-cured tobacco sold for $1.40 a pound in 1979, more than twice the selling price for Zimbabwe and Brazilian leaf.

Ironically, federal price supports designed to help the industry may be pricing U.S. tobacco out of the world market.

Over the longer term, the tobacco industry must also face the possibility of antismoking campaigns in foreign countries. As cigarette sales grow, foreign governments can benefit from increasing cigarette taxes. On the other hand, many observers point out that these governments must also consider the potential increase in health care costs and question the use of meager buying power for tobacco instead of food, especially where diets are inadequate.

Even with these obstacles, USDA economists expect shifts in U.S. tobacco exports through the 1980's with declines in developed country markets and some possible expansion concentrated in the developing nations where incomes and the demand for tobacco products are increasing.

Credit Crunch of 1980: The Squeeze Eases — A Tad

Despite a slight thaw in farm credit availability since midspring, most producers face an indefinite time of belt-tightening before the farm finance picture brightens appreciably.

Even with credit a little easier to obtain than earlier in the year, many farmers are still hearing "no" from lenders when they try to get loans to expand or to buy new equipment.

No one can confidently predict the farm finance situation when 1981 spring planting season rolls around, but hopefully it will be much better than the past spring when interest rates peaked and loan availability bottomed out—just when loan demands hit their seasonal high in most areas.

Faced with tight and expensive credit, many farmers had to sell crops and livestock earlier than anticipated, cut fertilizer and fuel use, and run their old equipment longer than they wanted to.

The subsequent easing of financial pressures still leaves producers facing higher than usual costs of borrowed money and that's adding to the burden of higher production costs.

This year's costs of production are estimated to average 10 to 14 percent higher than last year—well ahead of the expected 3-percent overall increase in farmers' cash receipts. This means lower net earnings than last year.

Some Fare Better

Farmers with a large equity base—and those less dependent on purchased inputs—are faring better. And those who produce certain commodities, such as grains, cotton, tobacco, and milk, appear to be better off than soybean growers and many livestock and poultry producers.

Hurting most are the recent entrants into farming who have relatively higher capital costs for purchases of land, machinery, and buildings. Most have a low equity base, and require financing on a larger proportion of operating expenses.

But even well-established, large operations, more likely to be heavily financed and less likely to have off-farm income, are feeling the pinch, too.

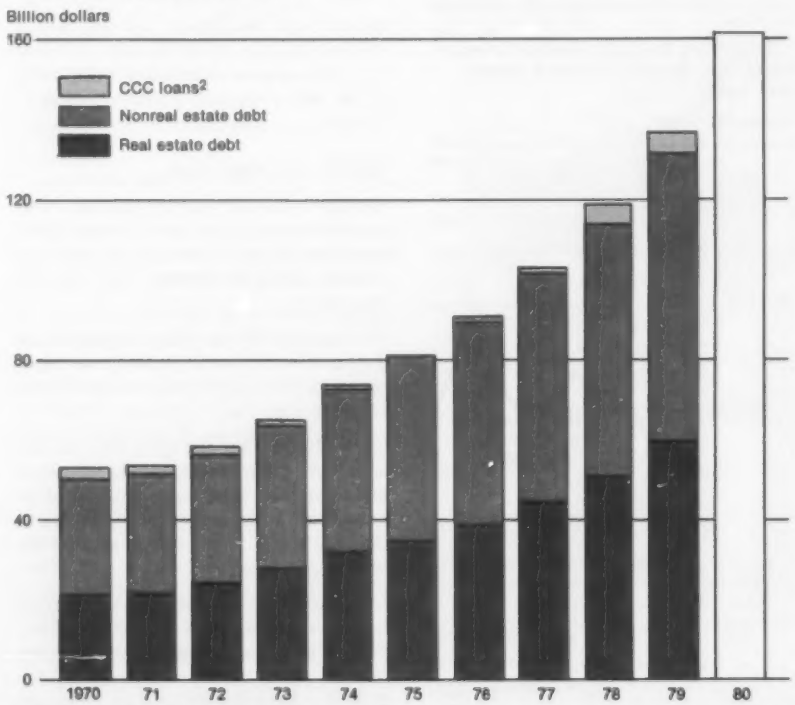
Fewer Loan Sources

Earlier in the year, some banks stopped accepting new loan accounts and imposed tighter loan limits on regular customers. New farm mortgage loans from life insurance companies almost dried up. Although those situations have eased, conditions aren't yet back to normal.

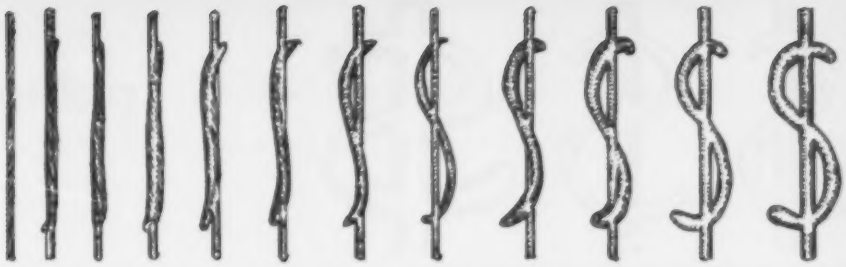
According to USDA economist Carson Evans, the tight credit situation has hit some farmers especially hard—particularly those in the northern and western Corn Belt states. There, even some otherwise well-qualified borrowers have had trouble getting enough production cash.

"The agricultural banks in those states had higher than usual loan-to-deposit ratios, mainly because of an unusual sequence of problems that hit the area during the latter part of 1979 and early 1980," he explains.

Farm Debt Triples Since 1970[1]



[1]Farm debt outstanding, January 1 each year.
[2]Farmers' debt from price support and storage loans made or guaranteed by the CCC.
1979 preliminary, 1980 projected.



In fall 1979, a dockworkers' strike held up grain at some lake terminals. By the time the strike ended, the winter freezeup came, severely hampering movement of the backed-up grain. Compounding the problem, railroads failed to provide their usual service to take up the slack. Farmers reportedly then turned in greater numbers to more expensive trucking to move grain.

Facing higher expenses in moving grain from these ports, buyers bid less. With the expected lower net price, many farmers chose to hold onto crops. Banks, already coping with falling deposit levels, had to carry the loans. Funds for new loans became scarce.

Money Costs Rose

In other areas of the country—especially in the southwest—farmers found credit more readily available, although at a high price. And, in some states, federal action removing some state usury laws made credit more available. To obtain loans, farmers—like everyone else—had to pay the going price of 15 to 18 percent on operating loans, compared with the 9 to 10 percent interest rates of a year earlier.

Even though high interest rates make life more difficult for the farmer, interest charges are still a relatively small part of total production costs—about 10 percent. This is becoming significant enough, however, to affect demand for production inputs and capital items, such as new machinery and real estate purchases.

The higher prices of energy-based inputs such as fertilizer are hitting farmers hardest. Even though they are getting by with less fertilizer, their total expenditures could rise a fourth. And farmers may spend 40 percent more for fuel this year, helping to drive up borrowing to meet farm operating expenses as much as 10 percent.

Debt Financing Continues

Looking ahead, dependence on debt financing will continue, according to Evans. Farmers rely more and more on purchased inputs, and these supplies keep costing more.

Earlier in the year, some banks stopped accepting new loan accounts and imposed tighter loan limits on regular customers. New farm mortgage loans from life insurance companies almost dried up. Although those situations have eased, conditions aren't yet back to normal.

And, although no consensus exists, some economists see persistent credit availability problems ahead. Rising input prices—especially for energy—will continue to hold down net farm income, and land prices will remain high.

Interest rates, they say, may be hard to reduce much as long as the general economy is plagued with high inflation. But even so, Evans says that money should continue to be available to producers with reasonably good financial standing.

This doesn't mean that credit won't dry up at times, Evans warns. "This is a big country. There probably will always be pockets of troublesome financial conditions at one place or another. However, nationwide, the farm finance network will continue to serve adequately."

Credit Easing Since Spring

Even with this less-than-comforting situation, credit availability has im-

Raising Cash When Credit is Tight

While farmers can't expect a simple answer to credit problems, they can turn to a number of places for production financing when their normal sources can't meet their needs:

- The FmHA has extended its emergency loan funds program to September 1981 with an additional $2 billion in guaranteed loans—half of which was made available in April and part of the other half since then. Check with your local FmHA office.
- Corn producers who aren't able to place their 1978 and 1979 crops in the farmer-owned reserve because of a shortage of local storage space can go to USDA for financial assistance. To qualify, you must be within an area designated as a critical storage area by the state ASCS office.
- There is no set-aside acreage requirement for 1980 wheat or feed grain crops, so all farmers are eligible for program benefits, including the loan and reserve programs, target price protection, and disaster payments. Farmers must sign up for grain programs at their ASCS offices to qualify for benefits.

Complicating the credit picture are recent changes in the terms of trade by some merchants. For example, you may have to make payment within 30 days, compared with 6 months formerly, to have the payment considered a cash transaction.

In response, some farmers have marketed crops earlier than usual to pay off their obligations and avoid future interest charges. Others have used the proceeds from early marketings to buy money market certificates, which earn higher returns than regular passbook savings.

Finally, farmers may be able to realize some better borrowing situations because of the recession. Because nonagricultural loan demand should dwindle the most, small rural banks should be able to get more loan funds from their larger correspondent banks.

proved somewhat since spring in most areas. Part of the reason is the passing of the spring planting season and the advent of recession in the general economy. However, loan to deposit ratios at rural banks are not likely to drop significantly—at least until spring plantings are harvested.

Those forecasting continuing credit problems say that since 1976 the loan-to-deposit ratio of rural banks has moved closer to that of nonagricultural banks—indicating that rural banks may not be as capable of serving farmers' loan demands as in the past.

This trend is tied to high demand for loans and slower deposit growth, as many farmers turn to investments other than passbook savings accounts for a higher rate of return. Competing banks must pay more for funds, thus forcing up loan interest rates.

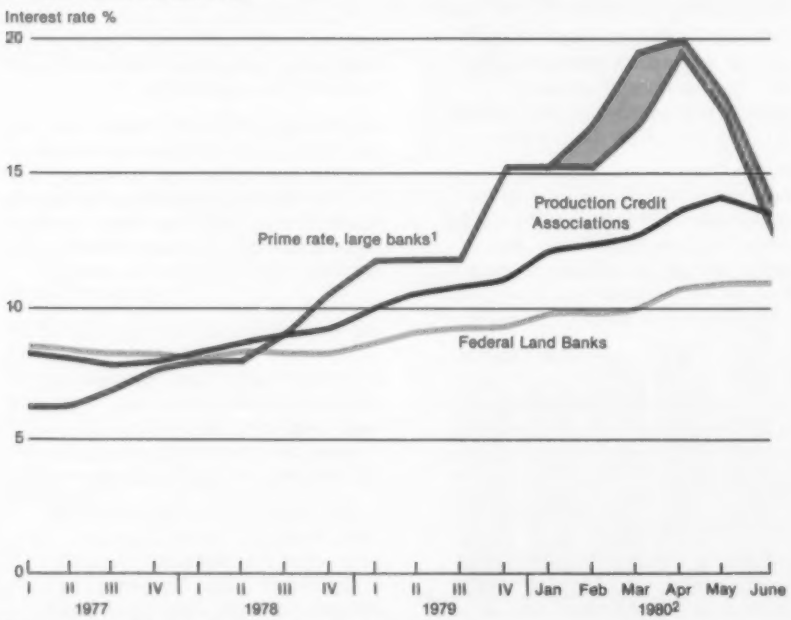
Still, interest rates charged farm borrowers average less than the prime rate in most cases, and farm loan interest rates are not as responsive to changing economic conditions as are business loans.

Farm Credit Banks Lending More

Although banks provide over half of all farm production loans from institutional lenders, the farmers' own cooperative credit system is an important source of loans—in some areas surpassing the farm credit furnished by banks.

Naturally, when banks find themselves in a tight spot, farmers turn in greater numbers to the Farm Credit System. And, as is usually the case in times of rising interest rates, the number and amount of loans from Production Credit Associations and Federal Land Banks (FLB) have risen dramatically—particularly the latter's.

Farm Credit System Rates Lag as Prime Rate Soars to and Plunges from Spring Peak



[1]Prime rate reported as a range from Feb.-June 1980.
[2]As of the first of each month.

Lagging Behind

Selling their own highly rated bonds in the central money market and using average cost pricing, Farm Credit bank rates typically lag behind the commercial bank prime rate when it is rising or falling.

Institutions in the system average the cost of new money in with money borrowed earlier at different interest rates and charge the borrower this average interest, which is lower during a period of rising rates.

But PCA's, which carry shorter-term debt liabilities, are more sensitive to general changes in interest rates. And, in some regions during the spring, they were reportedly turning down more than their usual number of financially questionable loan applicants.

"The Fed" Acts

Responding to urgings from farmers and bankers in some of the more hard-pressed regions, the Federal Reserve System in the spring took certain actions that allowed country banks to improve their loan fund availability at costs somewhat below money market rates.

In an attempt to provide more loan funds to rural banks, the Federal Reserve in April opened the discount window on a limited basis to nonmember banks with less than $100 million in deposits and loan-to-deposit ratios higher than the national average.

The success of the new Federal Reserve discount policy depends on the willingness on nonmember banks to borrow funds. If the discount rate is significantly above the federal funds rates, discount borrowing by small, nonmember banks is likely to be reduced.

FEATURE

Basis: The Beginning

This is the second article in a special FARMLINE series begun last month to provide more information about futures markets and how they work.

Although a good understanding of futures markets and their use can prove valuable, this series is not intended to recommend hedging as a marketing strategy. Hedging has its risks, as well as benefits, and successful hedging usually requires considerable knowledge, time, and skill.

The first step in using futures markets more effectively is to study the local basis--the difference between the futures market price for a selected month and the local spot market price.

This basis is a key to building a better marketing plan, regardless of whether that plan involves hedging in futures, says USDA economist Allen Paul.

Why is basis so useful as a marketing guide? Because it's more predictable from year to year than the movement of either cash or futures prices.

Basis is expressed as cents under or cents over price quotations for "nearby futures" (the nearest maturing futures contract) or for a specified futures contract month.

Keep Record of Prices

To develop a guide to your local basis patterns, record and compare daily or weekly local cash prices against the futures market quotations for your commodity over the last year—better still, over the last 3 years, according to Paul.

Because futures contracts mature in different months, basis patterns should be examined for each contract maturity month. Your state extension service may already have done this for past years, and you can probably find Chicago futures and your area's cash prices in a local newspaper to keep your records current.

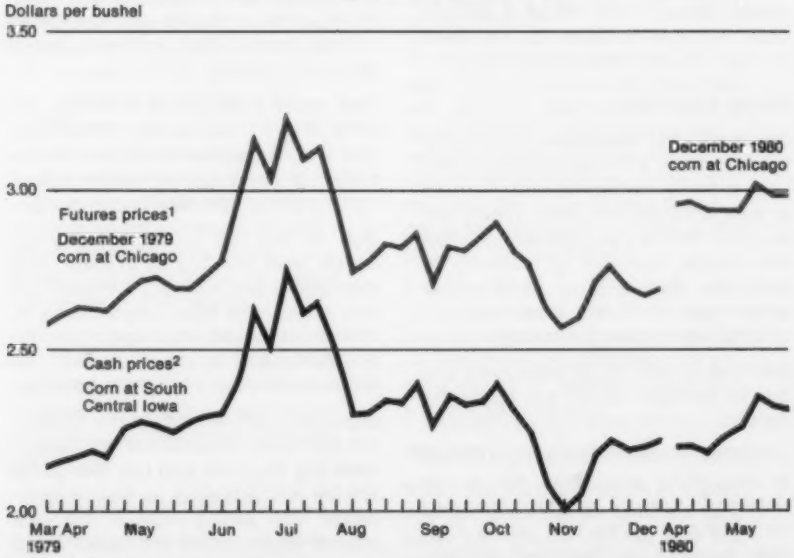
If the data are charted for any futures contract month, the two lines showing cash and futures prices will move roughly in parallel, with the cash price typically below the futures price. Even with the generally parallel movement, basis varies quite a lot.

A basis chart or table can serve as an early warning signal of potential problems or opportunities in marketing crops. If the basis is narrowing, it may herald a good profit opportunity. If it is widening, farmers should look for the reason.

A Market Indicator

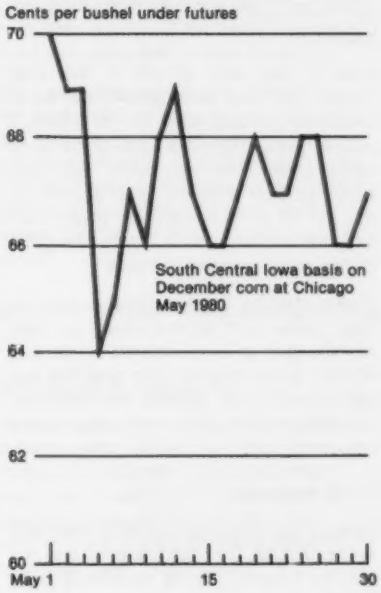
Many farmers use futures markets and basis patterns as an information source, preferring to "speculate" on the prices of

Cash and Futures Prices Move Roughly in Parallel . . .



[1]Weekly (Thursday) futures closing prices at Chicago on December corn contract.
[2]Average weekly (Thursday) cash prices at country elevators in South Central Iowa.
Source: AMS Market News.

. . . But Local Basis Varies Day to Day



their cash commodities. Others use futures indirectly, through forward contracts, basis contracts, or deferred pricing arrangements with cash market buyers.

Even if you deal strictly in the cash market, the local basis pattern can be an important pricing tool. For example, if you're being offered a cash price of 50 cents under and you know the local basis at that time of year should be around 45 cents under, you might want to shop around to see if you can get a better price somewhere else.

There may be a good reason why the local basis isn't typical—such as tight storage due to a transportation backup in your area—but it's also possible that the buyer's offer reflects his particular situation and is under the local market price.

Price Protection

Basis patterns are particularly important to the hedger. Through hedging, you can use the futures market to protect yourself against any major adverse price movements and to take advantage of normal basis patterns.

Some examples will make this clearer. In early June the cash price for corn at some points in Iowa was around $2.40 per bushel and the futures market was offering $2.92 for December 1980 corn at Chicago—a basis of 52 cents under.

Let's consider what an Iowa family that had just planted a few hundred acres of corn might have done back in June. If they planned to market their corn crop locally sometime in late November but expected cash prices to drop by fall, they might have examined their basis figures.

If, from their records, they expected their local basis on December futures to be around 42 cents under in late November, they might have used a futures hedge for part of their expected crop to try to lock in a price of $2.50 per bushel (the current futures price of $2.92 minus the expected late November basis of 42 cents).

To do this, let's say they decided to sell December futures contracts equal to half their expected fall harvest. Why not all of their expected crop? Because hedging only a portion of their expected crop protects them against heavy losses in futures.

Hedging the Whole Crop

Suppose they hedged every bushel they expected to harvest. If the national crop falls short of expectations, futures (and cash) prices could rise by harvesttime. That would mean the family would lose money on the futures market. And if their own crop also fell short of the quantity they hedged, they would have no offset for that part of their crop in the cash market.

Our sample family played it safe. After they placed their hedge, it doesn't matter whether cash or futures prices rise or fall for the hedged part of their crop.

As long as their basis prediction is accurate, they will get the price they seek—$2.50 per bushel (minus 2 or 3 cents for brokerage fees and interest on the margin deposit). Any losses or gains in cash prices will be offset by equivalent losses or gains in futures.

Falling Cash Price

Say their local harvesttime cash price drops to $2.20 a bushel and the futures price to $2.62—so that the basis narrows to their predicted 42 cents. When they buy back the futures contracts to offset their hedge, their gain on futures is 30 cents per bushel (their $2.92 selling price minus the $2.62 it cost them to liquidate their futures contracts).

Add that to their $2.20 cash price and they've averaged $2.50 per bushel for the portion of the crop that they hedged.

Of course, if their local cash price rises to over $2.50 when they sell in late November, they will lose the opportunity for additional gains that would have been available had they dealt strictly in cash.

Unexpected Basis Turn

However, suppose the basis doesn't follow the predicted course. If the basis narrows to less than 42 cents when they are ready to lift the hedge, they will beat their price objective regardless of the level or direction of change of cash and futures prices.

If the basis is the same on the date they lift their hedge as on the date it was placed, their average price would be the local cash price on the date the hedge was placed—in this case $2.40 per bushel. In fact, that may be a more realistic price objective, given the fluctuations in basis.

On the other hand, if the basis widens—a typical pattern at harvesttime—they won't meet their price target, though they may still beat the harvesttime cash price.

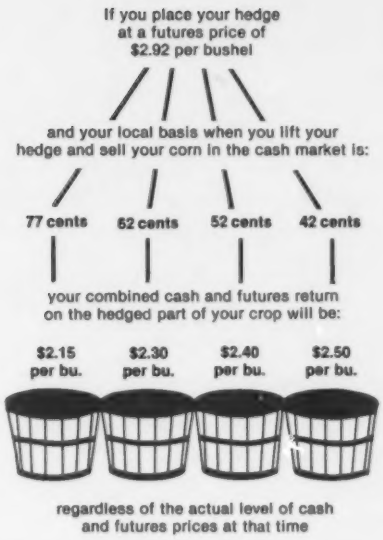
Timing Is Important

Of course, if the basis widens sharply and they don't lift their hedge in time, they could average less than the cash price. Such a loss might occur if cash prices drop to $2.20 and December futures reach $2.97 in November—a basis of 77 cents.

That would mean a loss in futures of 5 cents ($2.97 minus $2.92), which would give a price per bushel of $2.15 for the portion of the crop that was hedged—5 cents less than the $2.20 cash price.

Only in the last example would the hedge have resulted in a lower price than selling just for cash. Although that loss might have been avoidable by attentive account management, the possibility itself is enough to point out some of the risks involved in hedging.

Suppose, however, that in late September as harvest approaches, the basis is widening. Suppose also that cash prices are low and dropping, so that lifting the hedge and selling later in the cash market would not be profitable for our sample family. At that point, they might decide to consider another option.


If you place your hedge at a futures price of $2.92 per bushel
and your local basis when you lift your hedge and sell your corn in the cash market is:
77 cents
62 cents
52 cents
42 cents
your combined cash and futures return on the hedged part of your crop will be:
$2.15 per bu.
$2.30 per bu.
$2.40 per bu.
$2.50 per bu.
regardless of the actual level of cash and futures prices at that time

The Storage Hedge

Using their basis records, they can figure their probable return available for storing their hedged corn until later in the season versus hauling the grain directly to the local elevator at harvesttime. Of course, if they hold their crop, their return has to cover the extra costs of storage and interest charges.

For example, they might consider rolling over their December futures into a March hedge after checking how much their local basis normally narrows from harvest to springtime. It may be a sound marketing plan, based on the family's own production, storage facilities, and cash flow needs—if the basis chart tells them the odds are in their favor.

The examples above are only a few of the ways basis can be used as an important marketing guide. However, remember that inflation, transportation and storage costs, and interest rates affect the basis. These factors have tended to widen the typical basis in the last few years.

Why Basis Varies

Many farmers contend that basis should be about constant: For grains, they expect it to just cover the country elevator's handling charge, transportation to Chicago, and an unload charge there.

USDA's Allen Paul says this concept of basis dates back to the turn of the century when Chicago was the focal point of the agricultural marketing system. The largest cash grain flows passed by rail through Chicago to the major markets in the east and overseas. Livestock moved there for slaughter.

But in more recent decades, Chicago's place in the marketing chain has altered radically. It still exports a substantial amount of grain through the Great Lakes—but nowhere near the volume that moves down to the Gulf of Mexico.

Far more grains and oilseeds move in cash market channels today, and they move in diffused patterns. In the case of livestock and poultry, slaughter activity is now usually close to the point of production.

Transportation and Handling

Basis is still closely related to transportation and handling costs. But transportation to where? And handling costs for what?

Iowa grain may be moving down the river one day, to feedlots in the southwest the next, and heading through the Rockies the day after that. Or it may stay right in the same county where it was produced.

More and more livestock move to places like Dodge City, Kans., and Amarillo, Tex.—centers of feedlot and slaughter activities—rather than to major cities.

Today, the futures quote and the local basis really represent two separate sets of prices. The futures market price quotation covers the overall supply-demand balance—the national or international scene. It registers the major factors that account for perhaps 90 percent of the price of the commodity.

The local basis represents the other 10 percent of the price—the local market factors. Local basis reflects, for one thing, the positioning of the local market in relation to that day's commercial demand.

When the local market is in a good position to fill the demand, the local basis will usually narrow, and that can be one key to a profitable hedge.

Importance of Positioning

For example, if the Gulf needs grain to load waiting ships, then grain near Peoria, Ill., is better positioned than grain near Toledo, Ohio. If southwest feedlots need soybean meal, then mills in Iowa are better positioned than mills near Indianapolis.

When the local market is in a good position to fill the demand, the basis will usually narrow, and that can be one key to a profitable hedge.

Paul notes that basis also reflects such local factors as storage or the lack of it and whether local feedlots are buying feeder cattle and feed. Farmers' willingness to sell is another major factor in setting basis.

The local basis will also reflect typical seasonal supply and demand factors for the commodity. For annual crops, the dominant factor is the harvesttime bulge in stocks and tight storage space. That's when the basis usually widens, largely as a consequence of the heavy demand for storage.

The basis figure will also hint at more subtle pieces of information. If the Great Lakes are frozen early, if the Missouri is too low for barges, if railcars are in short supply, these factors will affect the basis, too.

FARMLINE TRENDS

	1978	1979					1980			
		Quarters					Quarters			
	Annual	I	II	III	IV	Annual	I	II	III	IV
										Forecast
					1967=100					
Farm Prices and Production:										
Prices received by farmers	210	240	245	241	237	241	236	231	242	245
Livestock and products	217	263	265	248	252	257	253	240	255	262
Crops	203	213	222	233	222	223	219	223	227	227
Prices paid by farmers, all items	219	239	247	252	258	250	271	277	281	—
Production items[1]	226	251	259	262	267	260	283	287	290	—
Farm production	121	—	—	—	—	129	—	—	—	—
Livestock and products	106	—	—	—	—	107	—	—	—	—
Crops	131	—	—	—	—	144	—	—	—	—
					1967=100					
Retail Prices:										
Food	211	228	234	237	240	235	245	251	258	262
At home	210	227	233	235	237	233	242	247	255	259
Away from home	218	233	241	246	251	243	258	264	270	276
Farm Food Market Basket:										
Retail cost	199	217	224	224	225	223	230	235	242	246
Farm value	208	238	236	227	228	232	228	223	236	243
Spread	194	205	216	223	224	217	231	242	246	247
Farmer's share (percent)	39	41	40	38	38	39	38	37	37	37
Per Capita Food Use:										
All products	105	—	—	—	—	106	—	—	—	—
Animal products[2]	102	100	98	100	104	100	101	100	101	104
Crop products	107	—	—	—	—	111	—	—	—	—
					billion dollars					
Farm Income:[3]										
Cash receipts	111.0	129.2	129.1	127.2	130.4	128.9	132.7	128.5	136.3	—
Livestock	59.0	69.8	67.8	65.2	66.2	67.2	67.5	62.5	66.8	—
Crops	52.1	59.4	61.3	62.0	64.2	61.7	65.2	66.0	69.5	—
Total gross farm income[4]	126.0	145.2	146.2	145.0	150.6	146.7	150.1	145.4	152.7	—
Production expenses	98.1	109.2	112.1	115.1	118.1	113.4	122.5	125.2	129.2	—
Net farm income	27.9	36.0	34.1	29.9	32.5	33.3	27.6	20.2	23.5	—
Trade:[5]										
Agricultural exports	27.3	8.2	7.7	7.9	8.2	32.0	11.0	10.3	9.0	8.0
Agricultural imports	13.9	3.9	4.1	4.4	3.8	16.2	4.4	4.6	4.9	4.9

[1] Including interest, wage rates, and taxes. [2] Quarterly data exclude fish products. [3] Quarterly data are seasonally adjusted at annual rates. [4] Includes net change in farm inventories. [5] Based on October-September fiscal years ending with the indicated year; for example, II 1980 refers to Jan.-March 1980 (the second quarter of fiscal 1980).

How Inflation Hurts Farmers

The recent slowdown in the rate of inflation throughout the economy is good news to farmers. It's easy to see why.

If your net farm income in 1975 was:	. . . to keep up with past inflation, you'd have to net this much this year:[1]	. . . and this much in 1985 if prices kept rising at the 1975-80 rate:[1]
$5,000	$7,060	$10,030
$10,000	$14,160	$20,050
$15,000	$21,240	$30,080
$20,000	$28,320	$40,100
$25,000	$35,400	$50,130
$30,000	$42,480	$60,150
$40,000	$56,640	$80,200
$50,000	$70,800	$100,250
$100,000	$141,600	$200,510

[1]Based on inflation throughout the general economy as measured by the GNP implicit price deflator.

Here's how prices of some of your farm production items have increased since 1975:

Diesel Fuel

July 1975 — 40 cents gal.
June 1980 — $1.00 gal.
Up 150%

Diammonium Phosphate 18-46-0

April 1975 — $263 ton
May 1980 — $298 ton
Up 13%

Medium Capacity Combine

June 1975 — $27,300
June 1980 — $47,500
Up 74%

Hired Farm Labor

April 1975 — $2.42 hr.
April 1980 — $3.61 hr.
Up 49%

Dairy Feed, 16% Protein

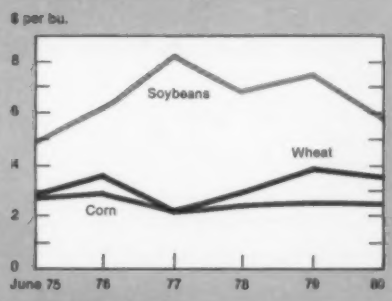
June 1975 — $130 ton
June 1980 — $167 ton
Up 28%

Pickup Hay Baler (PTO)

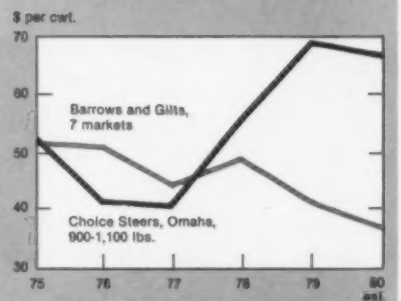
June 1975 — $3,920
June 1980 — $6,090
Up 55%

While USDA's index of prices paid by farmers for production inputs rose 54% between June 1975 and June 1980, farm prices for crops and livestock haven't kept pace. In June, some were higher and some lower than in 1975:

Corn, Wheat, and Soybeans



Cattle and Hogs



For all farm products, prices received by farmers rose 24% from June 1975 to June 1980—not nearly as much as the increase in input prices. But, with some exceptions, rising farm production helps make up the difference:

Corn Production

1974/75 — 4.70 bil. bu.
1979/80 — 7.76 bil. bu.
Up 65%

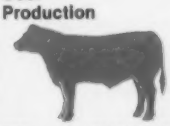
Wheat Production

1974/75 — 1.78 bil. bu.
1979/80 — 2.14 bil. bu.
Up 20%

Soybean Production

1974/75 — 1.22 bil. bu.
1979/80 — 2.27 bil. bu.
Up 86%

Beef Production



1975 — 23.7 bil. lbs.
1980 projected — 20.9 bil. lbs.
Down 12%

Pork Production

1975 — 11.3 bil. lbs.
1980 projected — 16.6 bil. lbs.
Up 47%

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